



NAWS – China Lake



Working with the Local Utility

History of SCE's UESC Program

- **Background**
 - Edison developed Energy Related Services (ERS) to assist Federal customers in identifying and implementing energy efficiency and renewable energy projects at government owned and/or managed facilities within Southern California Edison service territory
 - Established in 1998 under Advice Filing 1358-E
 - Approved by the California Public Utilities Commission (CPUC) January 1999.

History (Continued)

- ERS was developed at the request of SCE's federal customers after the closure of the ENVEST pilot in 1998.
 - ERS fit in with the federal government energy mandates
 - Makes working with utilities easier to meet these mandates.
 - ERS can leverage the knowledge and purchasing power of the utility to benefit federal customers, i.e., Navy, Marines, etc.
- ERS is prepared to strategize and discuss energy conservation opportunities for federal customers
 - On – site Alternative Energy: Wind, PV, others
 - Feasibility Analysis of all Energy Systems
 - Strategic Energy Efficiency Efforts

History (Continued)

- ERS total China Lake project value in 2003 was approximately \$300,000
- Grown to \$10,000,000 total project value in 2009
- These numbers represent the gross revenue of the projects paid for by customers.
- 20 projects completed or implemented between 2003 to 2009
- Federal customers taking advantage of ERS services have expressed a very high level of customer satisfaction
- The program has received numerous awards from the federal government.

History (Continued)

- The following table highlights the energy savings results that directly map into our programs.
- DSM Portfolio Results

	kWh	kW
2003	N/A	N/A
2004	2,476,000(identified)	286 (identified)
2005	272,368	90
2006	870,835	105
2007	1,972,312	217
2008	2,599,203	384
2009	876,945	93

History (Continued)

- The following table highlights renewable generation projects and associated kW.

	Renewable projects (kW)
2003	N/A
2004	N/A
2005	N/A
2006	32
2007	63
2008	82
2009	125

Please note results are based upon Federal Fiscal year – October 1st – September 30th.

China Lake Projects

- 2008 Renewable Solar Carports
 - 25kW Solar P_v
 - Annual generation: 37,280 kWh
 - Rated generation capacity: 21.24 kW
 - Measure Cost: \$342,150
 - SCE Incentive: \$48,843
 - 45kW Solar P_v
 - Annual generation: 69,723 kWh
 - Rated generation capacity: 40.58 kW
 - Measure Cost: \$439,143
 - SCE Incentive: \$94,930

China Lake Projects (cont.)

– 67kW Solar PV

- Annual generation: 98,560 kWh
 - Rated generation capacity: 60.52 kW
 - Measure Cost: \$665,998
 - SCE Incentive: \$152,878
- Projects are all connected to one meter and therefore share the same annual site kWh consumption and kW demand

China Lake PV ERS Projects

Total Measure Cost	\$1,437,290
Total SCE Incentive	\$296,651
Annual kWh Generation	205,491
Peak Generation Capacity (kW)	122
Annual Site kWh Consumption	95,668,956
Annual Site kW Demand	19,872



View of Carports



View of Carports





Questions?